

5 WE CLAIM:

1. A hand-held scanning device, comprising:

- a) a housing having walls bounding an interior, and a window;
- b) a generally planar printed circuit board mounted in said interior; and
- c) an optical scanning assembly mounted on said board and including a

10 scanner for directing a light beam through the window at an acute angle relative to said board exteriorly of the housing to an indicium to be scanned, and a detector for detecting light reflected from the indicium being scanned and for providing data signals representative of the indicium.

15 2. A hand-held scanning device, comprising:

a) a housing having a hollow body portion, and a hollow handle portion connected to, and extending away from, the body portion;

b) a generally planar, single printed circuit board mounted in an upright stance within the housing and extending between the body and handle portions; and

20 c) a scanning assembly mounted on a first side of the board, and operative for scanning a light beam through an aperture in the board and exteriorly of the housing between a pair of opposite scan end-limiting positions across an indicium having parts of different light reflectivity to be scanned;

25 wherein the board lies in a generally vertical plane that is at an angle to an intermediate scan position of the light beam, said intermediate scan position lying between the scan end-limiting positions.

5        3. The hand-held device according to claim 2, further comprising a sensor assembly mounted on a second side of the board for detecting light reflected from the indicium and converting the reflected light to an electrical signal.

10       4. The hand-held scanning device according to claim 2, wherein the scanning assembly lies at an upper region of the board that is located within the body portion.

15       5. The hand-held scanning device according to claim 2, and further comprising a manually actuatable trigger on the housing for initiating scanning, including a trigger switch on the handle portion of the housing.

20       6. The hand-held scanning device according to claim 3, and further comprising a signal processor on the board for processing the electrical signal generated by the sensor assembly.

25       7. The hand-held scanning device according to claim 2, further comprising an electrical connector on the handle portion of the housing.

      8. The hand-held scanning device according to claim 2, further comprising a radio frequency transmitter supported on the board.

      9. The hand-held scanning device according to claim 2, and further comprising a battery on the board for supplying electrical power to the scanning assembly.

5        10.        A method of making a movable scan element for supporting a mirror for  
scanning light in a laser scanning bar code reader, comprising the steps of:

(a)        spacing a first and a second support element apart by a gap bounded  
by edges of the support elements;

10        (b)        injection molding a curable, elastomeric material in flowable form  
over the edges and into the gap; and

(c)        allowing the curable, elastomeric material to cure and bond to the  
edges, and form a flexible hinge in the gap for enabling movement of the support  
elements relative to one another both away from and toward a stable rest initial  
position.

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